

255 Liter/Hr, In Tank Fuel Pump For 1985-1992 GM Cars and Trucks Catalog # 17933 INSTALLATION INSTRUCTIONS

- PLEASE study these instructions carefully before installing your new In-Tank Fuel Pump for 1985-1992 GM Cars and Trucks. If you have any questions or problems, do not hesitate to contact our Technical Hotline at: 1-800-416-8628, from 7am-5pm PST, Mon-Fri, or via e-mail at: Edelbrock@Edelbrock.com. Please fill out and mail your warranty card.
- Note: Proper installation is the responsibility of the customer. Improper or incomplete installation could result in poor
  performance, related component damage, potential severe engine damage, vehicle fire, and will void your warranty. If you
  do not feel comfortable installing these parts, we recommend having the installation performed by a professional mechanic.
- Description: This in-tank fuel pump replaces the factory pump and has an increased flow of 255 liters/hour (67 gph). This in-tank upgrade pump is ideal for supporting performance improvements such as a big-bore throttle body, high performance intake manifold, camshaft, supercharger, direct port nitrous system, etc. They replace your original pump exactly and include all necessary hardware for an easy installation:

#### Kit Contents:

#### Description Qty. **1** Fuel Pump $\Box$ 1 Fuel Pump Filter **1** Fuel Pump Adapter Grommet □1 Fuel Tank to Pump Bracket O-Ring $\Box 1$ **Electrical Connector** $\Box 1$ 6" Section of Fuel Hose\*\* $\square$ 2 Hose Clamps\*\* \*\*Not used in some vehicle applications.

## 'Minimum Tools Required:

- 1. Lift or appropriate jack
- 2. OSHA-approved jackstands
- 3. OSHA-approved fuel transfer pump
- 4. OSHA-approved fuel storage containers
- 5. Wire stripping and crimping tool
- 6. Various hand tools

# **INSTALLATION NOTES**

- Remember: When working on your vehicle, especially when oil or fuel is present, always work in a well ventilated area. Keep all sparks, open flames, or other sources of ignition away from the work area. Failure
  to do so could result in a fire or explosion causing vehicle or property damage, personal injury, and/or death.
- Before Beginning: This installation can be accomplished using common tools and procedures. However, you should have
  a basic knowledge of automotive repair and modification and be familiar with and comfortable with working on your vehicle.
  If you do not feel comfortable working on your vehicle, it is recommended to have the installation completed by a
  professional mechanic. Using a factory service manual for your vehicle for reference is helpful.
- Note: Steps shown in these instructions are intended as a general guideline only. If you are not an experienced mechanic, you should have a copy of your service manual on hand. The installation procedure for replacing your factory fuel pump is covered in full detail in your factory service manual.

### INSTALLATION PROCEDURE

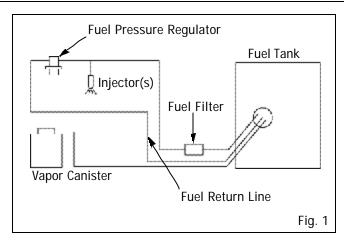
(Note: This rotary fuel injection pump will not work on carbureted fuel systems. It is for electronic fuel injection only.)

(Note: The word "bracket" used throughout these instructions refers to the fuel pump mounting bracket and fuel level sender assembly.)

#### **PRFPARATION**

- 1. Make sure the engine is cool and the vehicle is on level ground. Set the parking brake.
- 2. Remove the fuel pump fuse from the fuse block.
- 3. Start the engine and let it run until it consumes any fuel in the fuel lines, and runs out of fuel.
- 4. After the engine stops, crank it again for at least three seconds to assure the relief of any remaining pressure.
- 5. Remove the negative (ground) cable from the battery and position it so that it cannot make a connection to the battery during the fuel pump installation procedure.
- Drain the fuel tank. Use an OSHA-approved gasoline transfer pump, and remove as much fuel as possible through the fuel tank filler neck. Store the fuel in approved safety containers only.
- 7. Lift and safely support the vehicle with approved safety stands with enough height to gain clearance to remove the fuel tank. If lifting only the rear of the vehicle, remember to block the front wheels.
- 8. Once the vehicle is lifted and supported, an alternate method of fuel removal may be implemented. Determine which line is the fuel return line going back to the fuel tank (See Fig. 1). Three lines are attached to the bracket. The first is the feed line which leads to the fuel injectors, and has the fuel filter in it. The second is the return line from the injectors. The last is the vapor line which leads to the vapor canister. Trace the return line back from the injectors and remove it from the bracket. Securely attach a hose to the exposed fuel return tube which leads into the tank, and draw the remaining fuel out and into an approved gasoline storage container.

(Note: Regardless of the method used to remove fuel from the tank, it is important to remove as much fuel as possible before removing the tank. This is required to help prevent fuel spillage, and injury from excessive weight while removing the tank).



### FUEL TANK REMOVAL

(Caution: The fuel tank can be quite awkward to remove due to its size and weight. Obtain help during its removal).

(Note: The following instructions may not be specific to your particular vehicle. See your factory service manual for specific instructions).

- 1. Disconnect the electrical connector at the fuel tank to main harness connector. Support and partially lower the tank, if needed.
- 2. Disconnect any hoses attached between the fuel tank and the vehicle. Be careful to avoid fuel spillage when disconnecting the fuel lines. Mark the hoses to make sure they are properly reconnected when the tank is reinstalled.
- 3. Remove the fuel filler neck, if necessary.
- 4. Support the fuel tank and remove the retaining straps to allow the tank to be removed from the vehicle. Remove the fuel tank being careful not to spill any remaining fuel.
- 5. Note the condition and position of all fuel tank mounting pads and insulators used to isolate the fuel tank from the vehicle body. Mislocated, deteriorated, or incorrect pads and/or insulators can cause objectionable transmission of fuel pump noise into the vehicle.

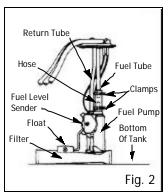
#### BRACKET REMOVAL

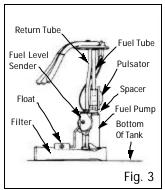
- Thoroughly clean all dirt and debris from the top of the tank. Clean out any dirt from around the locking ring and retainer. This must be done to prevent dirt of foreign material from falling into the fuel tank while removing the bracket.
- 2. Lubricate the locking ring with penetrating oil to assist in its removal. Remove the locking ring by rotating in a counterclockwise direction. This can best be

- accomplished safely by using the proper service tool as specified in the factory service manual. Using the proper tool is ideal. However, the locking ring can be removed by other methods. Whichever method you use, do not use any method that could potentially cause sparks resulting in fire or explosion.
- 3. Once the locking ring is removed, carefully remove the bracket from the fuel tank. Be careful not to bend the float arm or scratch the float when it is removed. Discard the old fuel tank to bracket o-ring seal.

#### PUMP REMOVAL AND REPLACEMENT

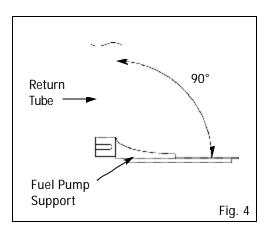
- Note the position of the fuel pickup filter in relation to the bracket before removing the filter. Remove the filter by pulling on it while rotating it in one direction. Discard the filter.
- Note the polarity of the electrical connections at the pump and remove the electrical connections. Write down which wires are connected to the positive and negative terminals and the respective color of each wire's insulation.
- 3. (Note: Your original pump will be mounted in one of two ways. See Fig. 2 and 3. If it is mounted as shown in Fig. 2, then follow step 3a for removal. If it is mounted as shown in Fig. 3, follow step 3b for removal).





- 3a. Remove the hose clamps, if so equipped, cut the rubber hose, and remove the pump from the bracket. Remove the cut hose piece from the bracket tube and discard it, along with the used hose clamps.
- 3b. Remove the pump by inverting the bracket. Pull down on the fuel pump until the inlet end clears the pump support and swing it to the side. Remove the pump and pulsator from the bracket fuel outlet tube. Save the pulsator and the pulsator to fuel pump rubber spacer for use in mounting the new fuel pump.

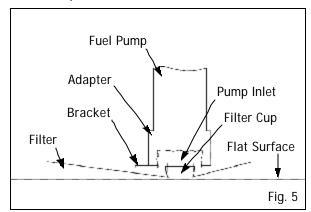
4. Inspect the bracket to ensure that the pump support has not been bent during pump removal. The flat surface of the support should be perpendicular (square) to the tube it is welded to (See Fig. 4). If it is out of square, carefully bend it back to square to allow the pump to fit properly. Take care not to damage the support or the tube.



- 5. Install the supplied pump rubber adapter grommet onto the inlet side of the pump. Test fit the pump on the bracket and rotate the adapter grommet on the pump as required to obtain the best pump outlet fitting to bracket outlet tube alignment.
- 6. (Note: Your original pump will be mounted in one of two ways. See Fig. 2 and 3. If it is mounted as shown in Fig. 2, then follow step 6a for installation. If it is mounted as shown in Fig. 3, follow step 6b for installation.)
  - 6a. Using petroleum jelly, sparingly lubricate the fuel pump outlet tube on the bracket and the pump outlet fitting. With the supplied rubber hose and clamps, slip the hose and one clamp over the the fuel outlet fitting on the pump. Invert the sending unit and place the remaining clamp over the fuel outlet tube. Install the rubber hose and pump onto the fuel outlet tube on the bracket. Guide the pump adapter grommet into the pump support on the bracket. When the pump and adapter grommet assembly are firmly seated in the pump support, verify that the rubber hose is seated against the fuel pump, and then position and tighten the hose clamps.
  - 6b. Using petroleum jelly, sparingly lubricate the fuel pump outlet tube on the bracket and the pump outlet fitting. Install the rubber spacer and pulsator onto the fuel pump. The spacer and pulsator are to be fully seated against the pump when properly installed. Invert the bracket assembly and install the pump and pulsator assembly onto the fuel outlet tube on the bracket.

Guide the pump adapter grommet into the pump support on the bracket. Firmly seat the pump and adapter grommet into the pump support. Then verify that the pulsator and spacer are still fully seated against the pump.

- 7. Install the supplied electrical connector to the pump and to the factory fuel pump wiring harness plug.
- 8. Install the new fuel filter on the pump in the same position or orientation as the original filter. To avoid damage to the filter, place it on a clean, flat surface and push the pump straight down into the filter cup until it is fully seated on the pump (See Fig. 5). (Note: Take care to properly align the filter the first time. If it has to be removed, the filter will be contaminated or destroyed by removing it, and a replacement filter will be needed.)



### BRACKET INSTALLATION

- Inspect the fuel tank for dirt and debris. If the amount of dirt or debris is excessive, clean the fuel tank before installing the bracket assembly.
- 2. Inspect the bracket to make sure it is clean and ready for installation.
- 3. Place the supplied fuel tank o-ring seal in the groove at the fuel tank opening. Place the bracket assembly into the tank using care not to disturb the o-ring seal or to hang the float assembly on any protrusions in the tank. Also use care not to fold or twist the filter, as this could cause restricted fuel flow. Install the locking ring and rotate it clockwise until it is properly seated against the stops. Check service manual for an approved sealant for locking ring.

### **FUEL TANK INSTALLATION**

1. Inspect the condition and location of all tank mounting

- pads, insulators and brackets. Defective, missing or mislocated pads and insulators will cause the transmission of excessive noise into the vehicle.
- 2. Inspect and correct any defects in the fuel hoses, filler neck connections, or similar components related to the fuel system.
- Install the fuel tank in the vehicle and tighten the tanks support strap bolts. Reconnect all lines and hoses and tighten securely. Connect the electrical connections. Make certain that all hoses, fittings, and electrical connections are correctly and securely attached.
- 4. Be sure that all fuel lines are correctly routed and secured in any mounting brackets. Make sure the wiring harness is installed in the original position and secured in any wire clips or brackets, if present.

# WRAP UP

- 1. Using only equipment approved for use with gasoline, refill the fuel tank with gasoline. (Note: Always clean any gasoline spills immediately).
- 2. Inspect the fuel system for leaks. Repair any leaks before proceeding.
- 3. With the ignition switch off, install the fuel pump fuse, and reconnect the negative (ground) cable to the battery.
- 4. Turn the ignition key to the "Run" position only. This will charge the fuel system. You may need to do this a few times to get pressure. Once you have pressure, check for any leaks and repair. Then, start engine and re-check for leaks. (Note: Turn off engine and correct any leaks before continuing.).
- 5. Clear any trouble codes in the electronic control unit (ECU) that may exist as a result of the fuel pump replacement procedure. Use the factory service manual for assistance, if necessary.

#### TROUBLESHOOTING

Should the fuel pump fail to operate:

- 1. Check the fuel pump fuse and fuel pump relay as outlined in the factory service manual.
- 2. If the pump has power and proper polarity, check the remainder of the fuel system as outlined in the service manual.

(Note: This pump will not remedy any malfunctions in the fuel pressure regulator, fuel injectors, or other fuel system problems).

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